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Bald Eagle/Osprey Nesting Success

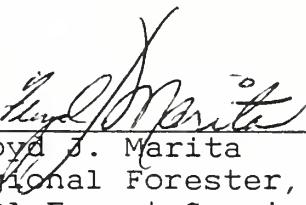
in the National Forests of the Eastern Region



FORWARD

This 26th Annual Report on the status of the Eastern Region's Bald Eagles and Ospreys is a significant step in the long-term monitoring of population trends of these species on the National Forests. We are pleased to report that populations of both species continue to increase.

This survey is part of a continuing multi-agency effort to follow and better understand relationships between wildlife habitat and other environmental influences. These surveys provide not only consistent trend information, but also demonstrate that this kind of monitoring is practicable. We are confident that these efforts will improve communication, strengthen our information base, and clarify options for integrating the management of eagle and osprey habitat with other National Forest uses.


Floyd S. Marita
Regional Forester, Eastern Region
USDA Forest Service

*Caring for
the Land
and Serving
People!*



BALD EAGLE-OSPREY NESTING REPORT
USDA-FOREST SERVICE - EASTERN REGION
1988

Breeding activities of bald eagles and ospreys on the National Forests of the Eastern Region have been monitored for 26 consecutive years. Aerial surveys to determine breeding activity at nest sites are conducted in April and May. Productivity surveys are conducted in July to count the number of young eagles and ospreys produced at occupied nest sites.

Survey methods were consistent for the years 1974 through 1984. In 1985, the Superior NF suspended the productivity survey within the Boundary Waters Canoe Area (BWCA) to avoid conflicts with recreationists. Since 1986, the Superior NF has conducted the aerial occupancy survey both within and outside the BWCA, but has conducted the productivity survey within the BWCA from ground and water reconnaissance only.

There appear to be 2 problems associated with ground and water reconnaissance for performing the productivity surveys: 1) few additional nests are located, and 2) the number of young appears to be underestimated. Statistical validity is being analyzed by the USDI-Fish and Wildlife Service but the results are not yet available.

BALD EAGLE

The number of nests examined on the National Forests increased from 518 in 1987 to 528 in 1988. Correspondingly, the number of breeding areas, "the area associated with one territorial pair of eagles and containing one or more nest structures," also increased from 366 in 1987 to 370 in 1988.

The productivity surveys in 1988 found 295 nests occupied by adult eagles. This is an increase in 14 eagle pairs over the 1987 total of 281. The Superior NF reported that the number of occupied nests increased by 15.

The Chequamegon and Ottawa NFs reported a reduction in occupied nests. This is the second year for a reduction in occupied nests reported from the Ottawa NF.

The Superior NF continued their reward program for individuals turning in new sightings of eagle and osprey nests. This program has been in existence since 1986. Nineteen new eagle nests and 25 osprey nests were reported during 1986-1988. An estimated cost savings of \$6,600 has resulted from this program.

The Monongahela NF reported the first successful eagle nest in recent history. Nesting activity was observed in 1987 but produced no young. One eaglet was fledged in 1988.

Five eagle nests were found in Missouri in 1988, with 2 nests located on the Mark Twain NF which resulted in 2 eaglets.

The Eastern Region portion of the Northern States Bald Eagle recovery objective is 427 occupied breeding areas by 2000-2020.

In 1988, the Region had 295 occupied breeding areas, an attainment of 69% of the recovery objective. This is a 3% increase over the 1987 figures.

The recovery objectives for the Lakes States Forests ranged from 28% on the Hiawatha NF to 90% on the Chippewa NF. The Superior NF attained 76% of their recovery objective and the Huron-Manistee NF attained 75%.

OSPREY

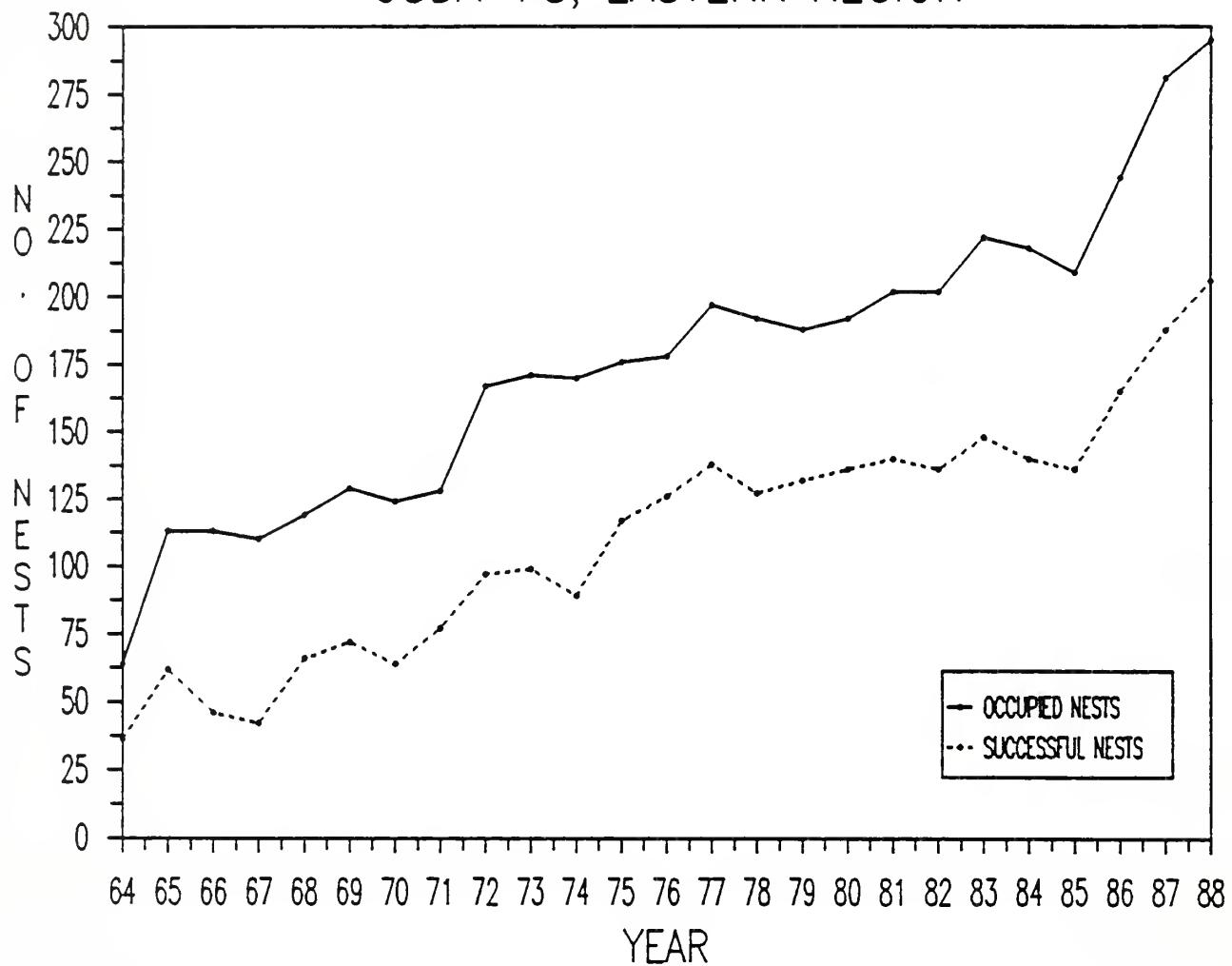
The number of osprey nests reported for 1988 totalled 418, an increase of 34 over 1987. The Chippewa NF leads the region with 216 nests, while the Superior NF reported 114, an increase of 25. The Superior NF also reported the unusual incidence of 4 young in a nest in 1988.

The total number of occupied nests in the Region declined by 1. The Ottawa NF reported a 60% decline, down to 4 occupied nests. The Hiawatha NF reported a 37% decline, down to 19. The Chequamegon NF reported 4 occupied nests in 1988, an increase of 75%.

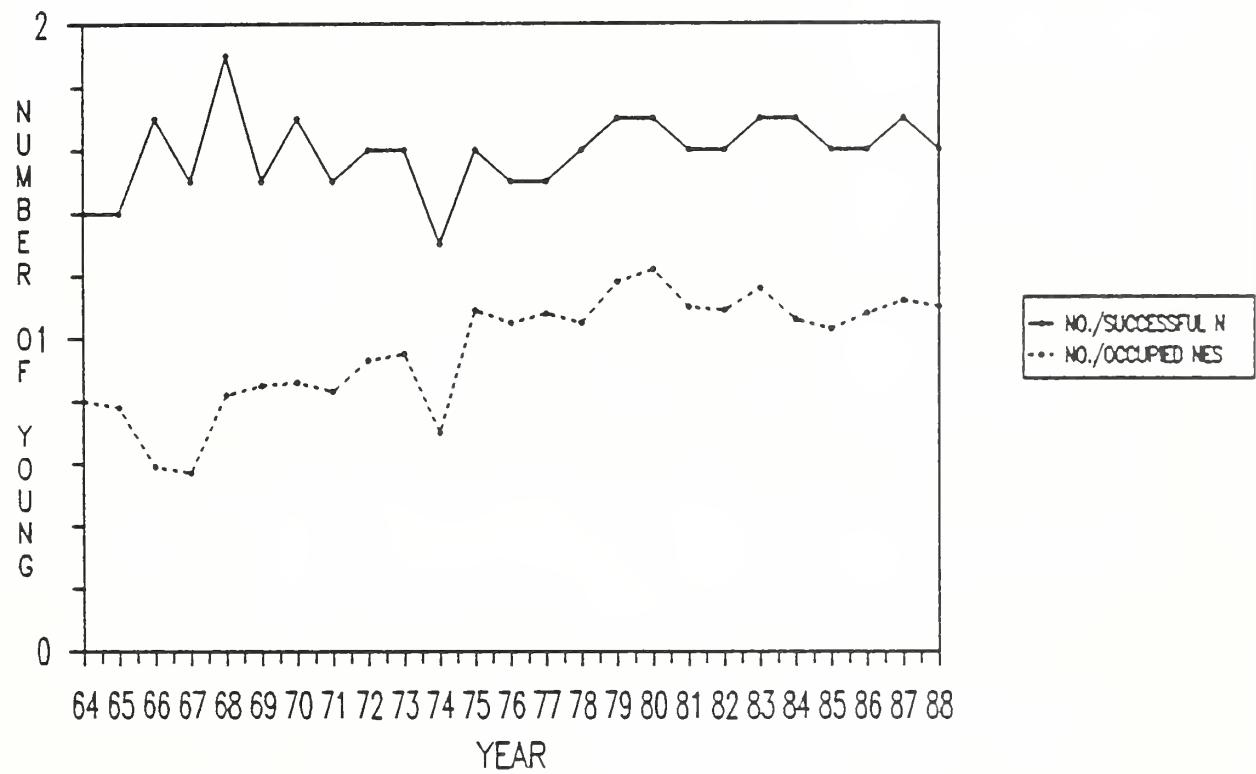
Across the Region the number of young produced increased by 35. The Superior NF reported an increase of 25, up to 72. The Nicolet NF reported 33 young, up from 14, for a 58% increase. The Chequamegon NF produced 7 young this year, up from zero in 1987. The Ottawa NF reported a 60% decline, down from 5 to 2.

The Ottawa NF erected 3 osprey nesting platforms in 1987. One platform was occupied in 1988, but no young were produced.

BALD EAGLE NESTING TRENDS USDA-FS, EASTERN REGION

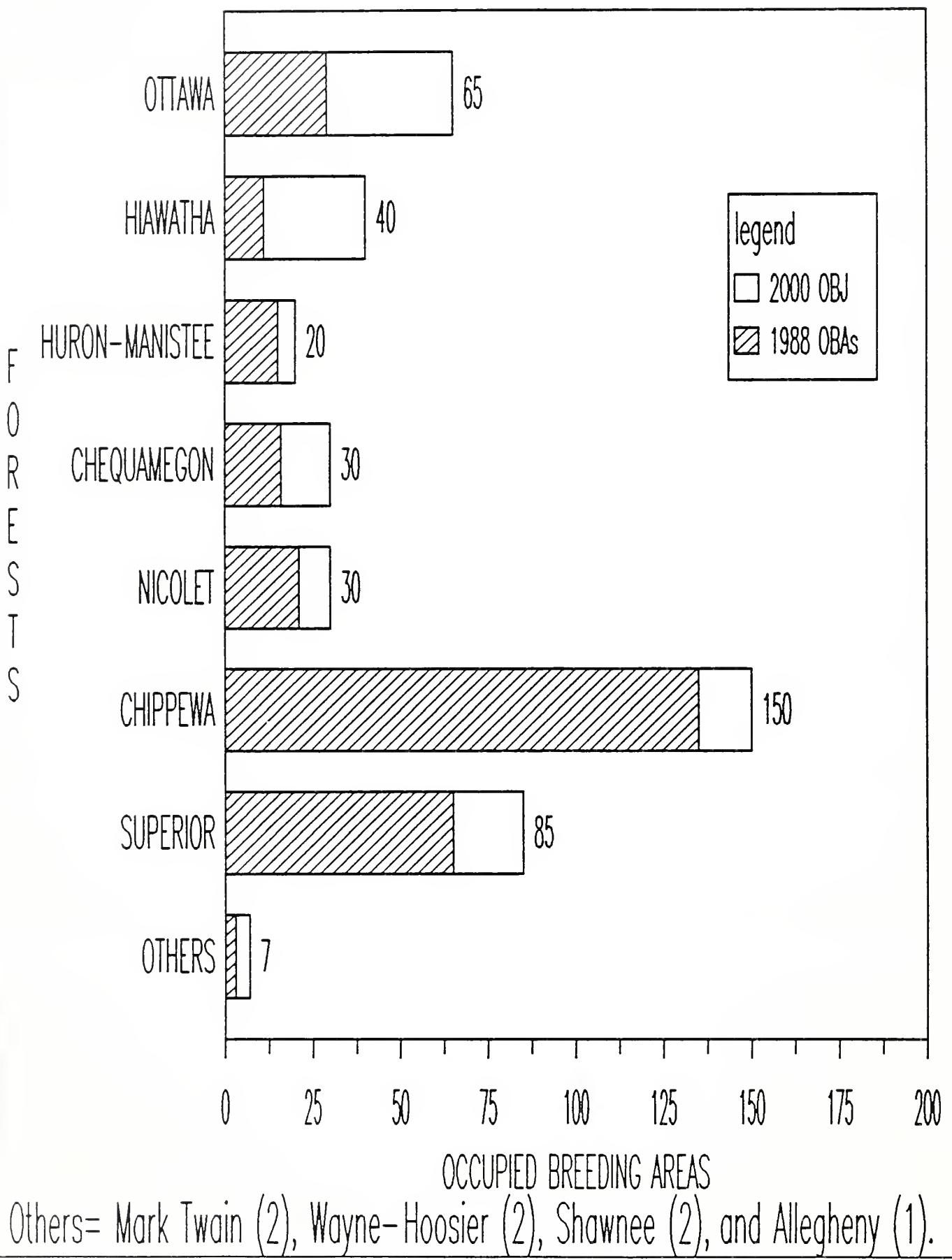


BALD EAGLE BREEDING SUCCESS USDA-FS, EASTERN REGION



R-9 BALD EAGLE RECOVERY

ATTAINMENT OF OBJECTIVES



BALD EAGLE RECOVERY ATTAINMENT

FOREST	1988 OBAs	RECOVERY OBJECTIVE	PER CENT ATTAINED
Allegheny	0	1	0
Chequamegon	16	30	53
Chippewa	135	150	90
Hiawatha	11	40	28
Huron-Manistee	15	20	75
Mark Twain	2	2	100
Monongahela	1	0	NA
Nicolet	21	30	70
Ottawa	29	65	45
Shawnee	0	2	0
Superior	65	85	76
Wayne-Hoosier	0	2	0
Regionwide	295	427	69

BALD EAGLE NESTING TRENDS

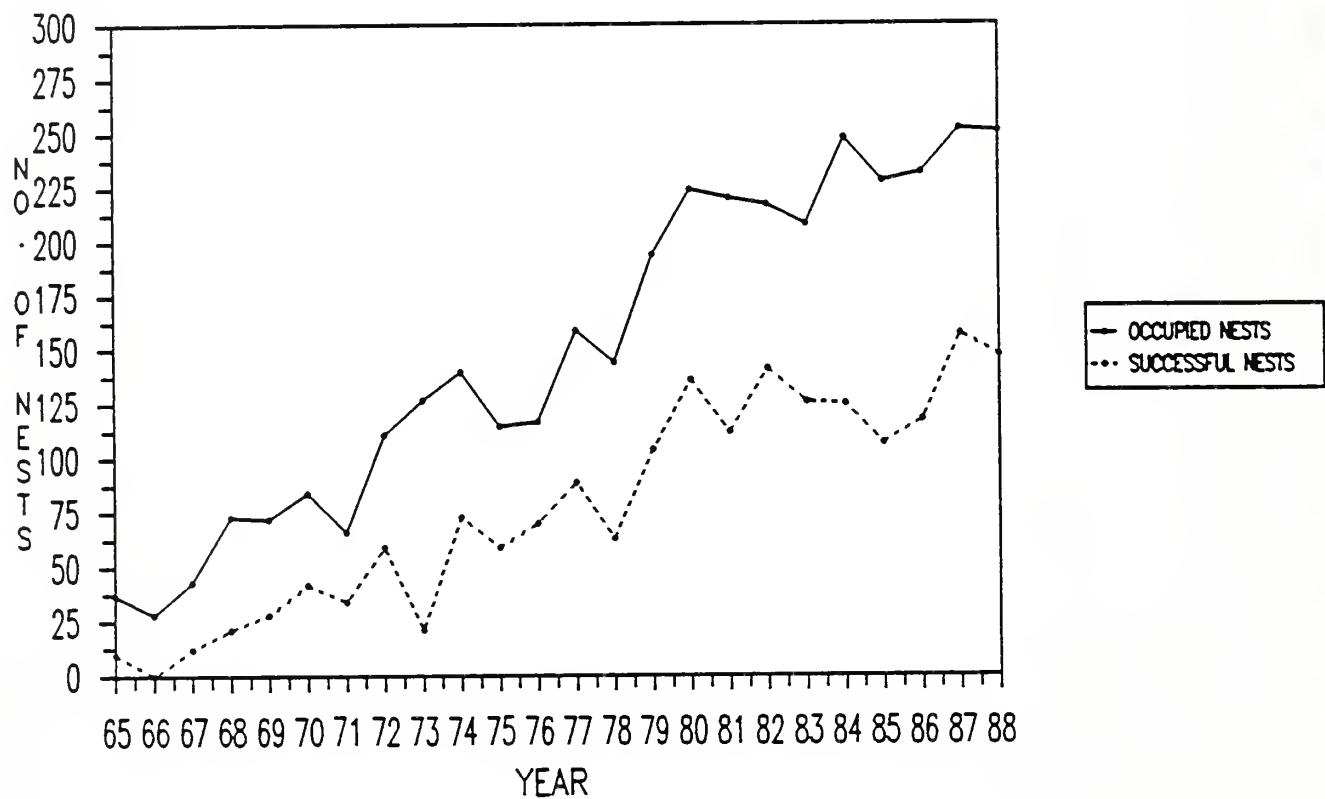
USDA-FOREST SERVICE, EASTERN REGION

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG	
			No.	%	No.	%	No.	Per Successful Nest
							No.	Per Occupied Nest
1964	156		64	50	36	56	51	1.4
1965	204		113	63	62	55	88	1.4
1966	265		113	57	46	40	67	1.7
1967	304		110	53	42	38	63	1.5
1968	323		119		66	55	98	1.9
1969	344	166	129	78	72	56	109	1.5
1970	294	189	124	66	64	52	107	1.7
1971	327	188	128	68	77	56	115	1.5
1972	356	238	167	70	97	58	155	1.6
1973	382	264	171	65	99	58	163	1.6
1974	381	257	170	66	89	52	119	1.3
1975	398	285	176	62	117	67	192	1.6
1976	414	260	178	68	126	71	187	1.5
1977	421	265	197	75	138	70	212	1.5
1978	435	264	192	73	127	66	202	1.6
1979	432	269	188	70	132	70	222	1.7
1980	456	282	192	68	136	71	235	1.7
1981	458	277	202	73	140	69	223	1.6
1982	446	288	202	70	136	67	220	1.6
1983	459	296	222	75	148	67	257	1.7
1984	458	294	218	74	140	64	231	1.7
1985	453	314	209*	67	136*	65	216*	1.6
1986	451	321	244	76	165	68	263	1.6
1987	518	368	283	77	188	67	315	1.7
1988	528	370	295	80	206	70	325	1.6
								1.10

* Eagle nests in the BWCA were not surveyed for success. From 1986 to present the productivity surveys were conducted from ground and water reconnaissance only.

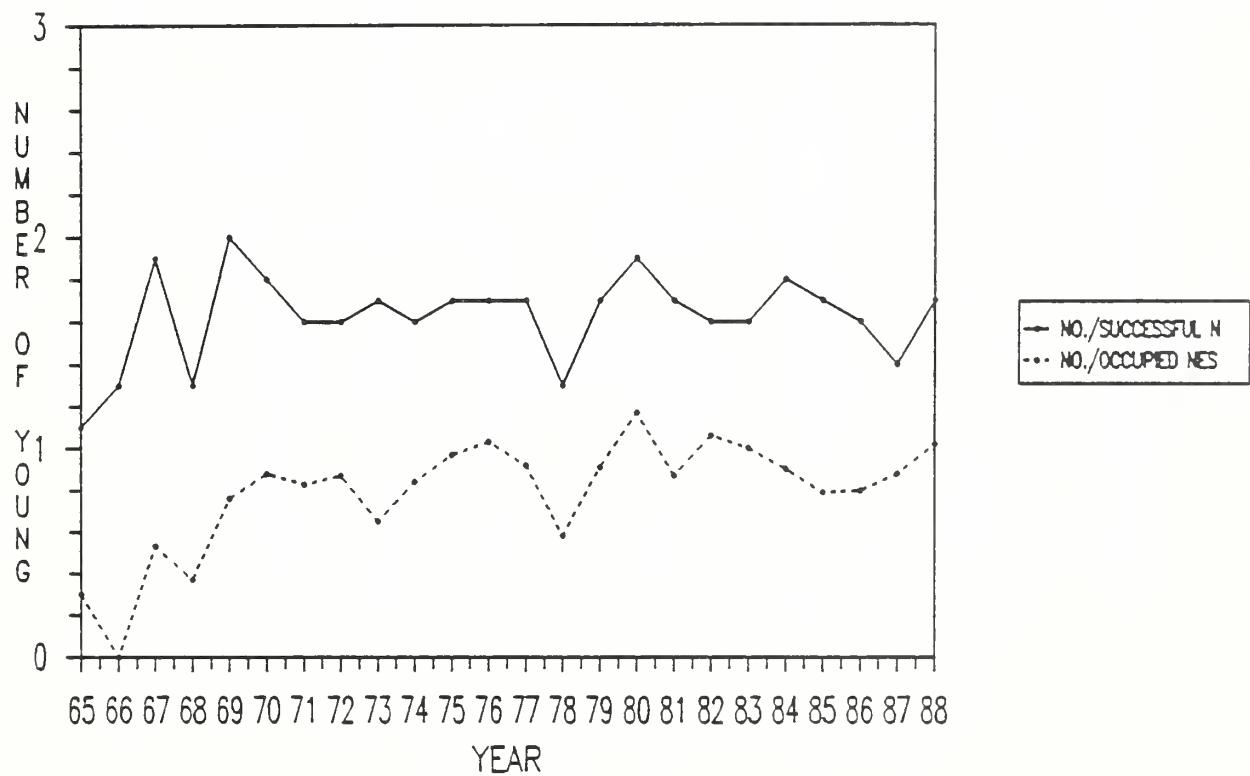
OSPREY NESTING TRENDS

OSPREY NESTING TRENDS USDA-FS, EASTERN REGION



1985-88 Only occupancy surveys in BWCA

OSPREY BREEDING SUCCESS USDA-FS, EASTERN REGION



OSPREY NESTING TRENDS

USDA-FOREST SERVICE, EASTERN REGION

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1965	79		37	59	10	27	11	1.1	.30
1966	94		28	45			5	1.3	
1967	137		43	61	12	28	23	1.9	.53
1968	152		73		21	29	27	1.3	.37
1969	183		72		28	39	55	2.0	.76
1970	157	93	84	90	42	50	74	1.8	.88
1971	140		66		34	52	55	1.6	.83
1972	205	130	111	85	59	53	97	1.6	.87
1973	226	154	127	82	21	38@	36	1.7	.65@
1974	252	140	140	100	73	52	118	1.6	.84
1975	238	157	115	73	59	51	102	1.7	.97
1976	249	154	117	76	70	60	120	1.7	1.03
1977	254	197	159	81	89	56	147	1.7	.92
1978	316	193	144	75	63	44	84	1.3	.58
1979	303	304	194	64	104	54	176	1.7	.91
1980	305	308	224	73	136	61	262	1.9	1.17
1981	307	314	220	70	112	51	192	1.7	.87
1982	320	294	217	70	141	65	229	1.6	1.06
1983	357	321	208	65	126	61	207	1.6	1.00
1984	343	327	248	76	125	50	222	1.8	.90
1985	309*	355*	228*	64	107*	47	181*	1.7	.79
1986	327*		232		118	51	185	1.6	.80
1987	379		252		157	62	222	1.4	.88
1988	418	317	251		147	59	257	1.7	1.02

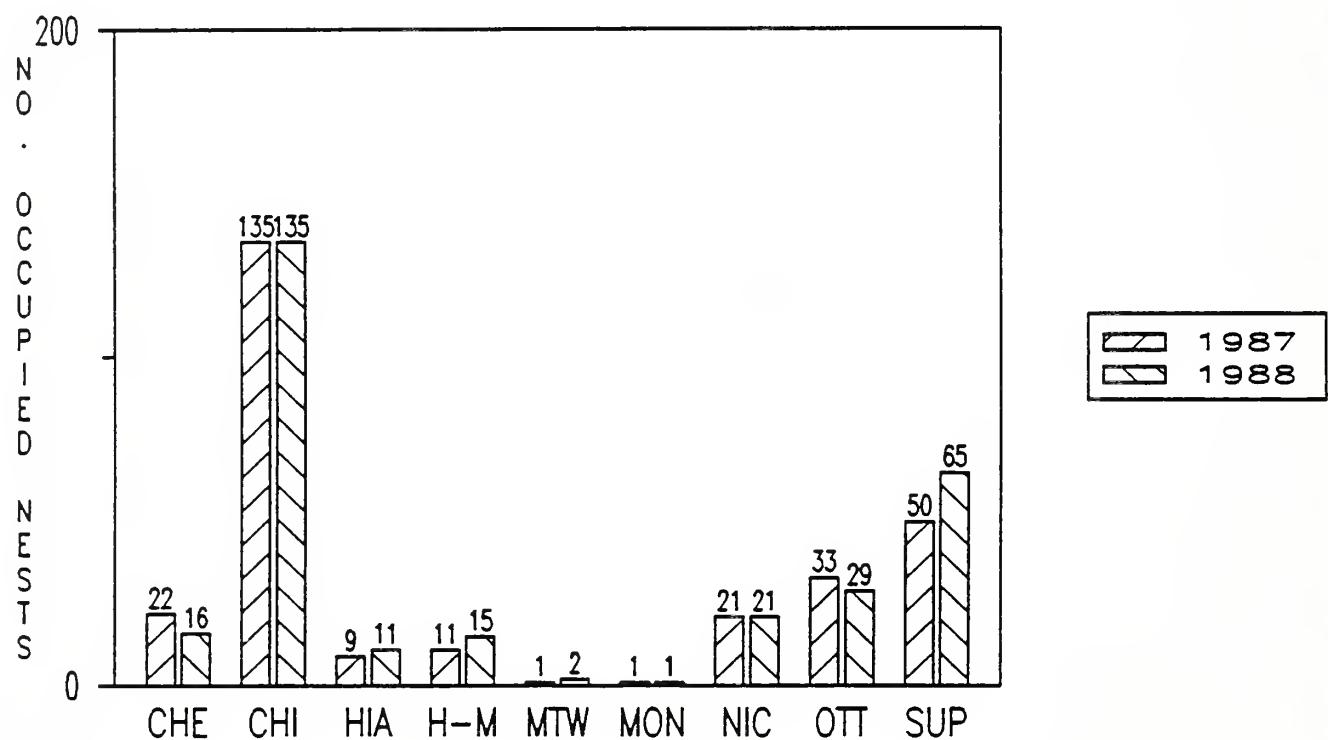
@ Chippewa NF incomplete data excluded from calculations.

* In 1985 Osprey nesting surveys were not conducted in the BWCA. From 1986 to present productivity surveys were conducted from ground and water reconnaissance surveys only.

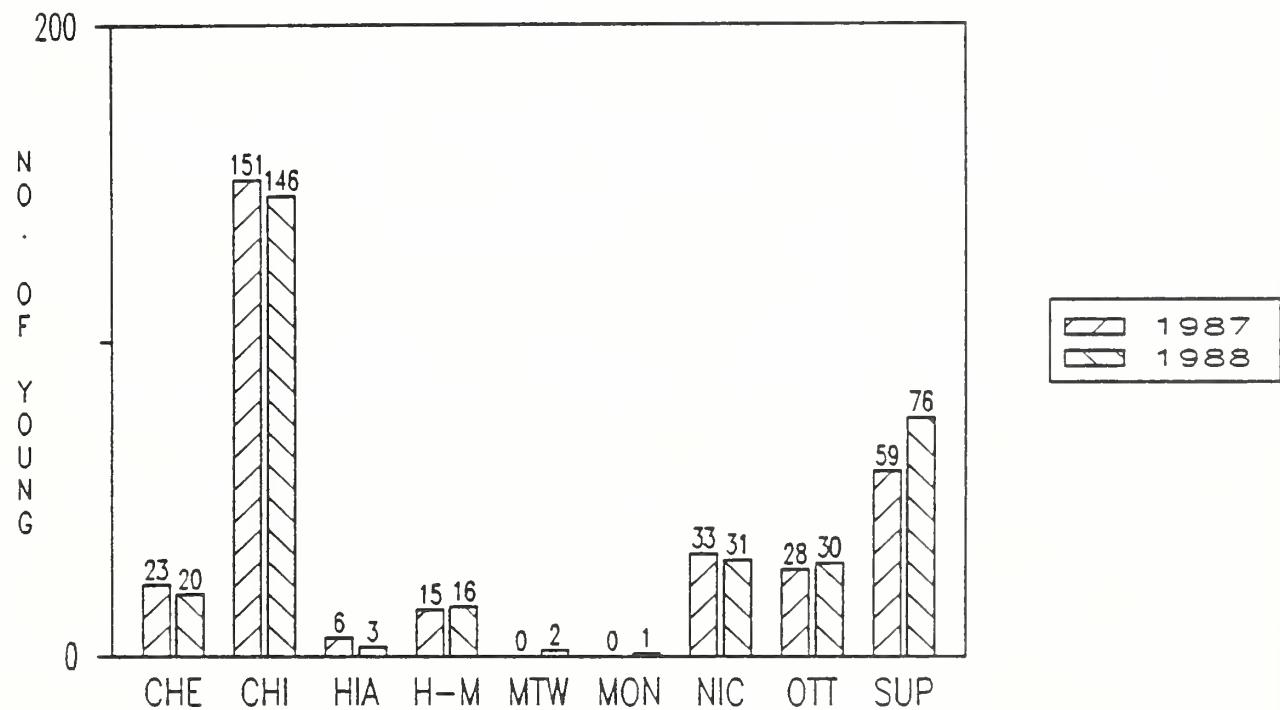
BALD EAGLE NESTING TRENDS BY
NATIONAL FOREST

1987-1988 COMPARISONS

BALD EAGLE OCCUPIED NESTS 1987-1988 COMPARISONS



BALD EAGLE YOUNG PRODUCED
1987-1988 COMPARISONS



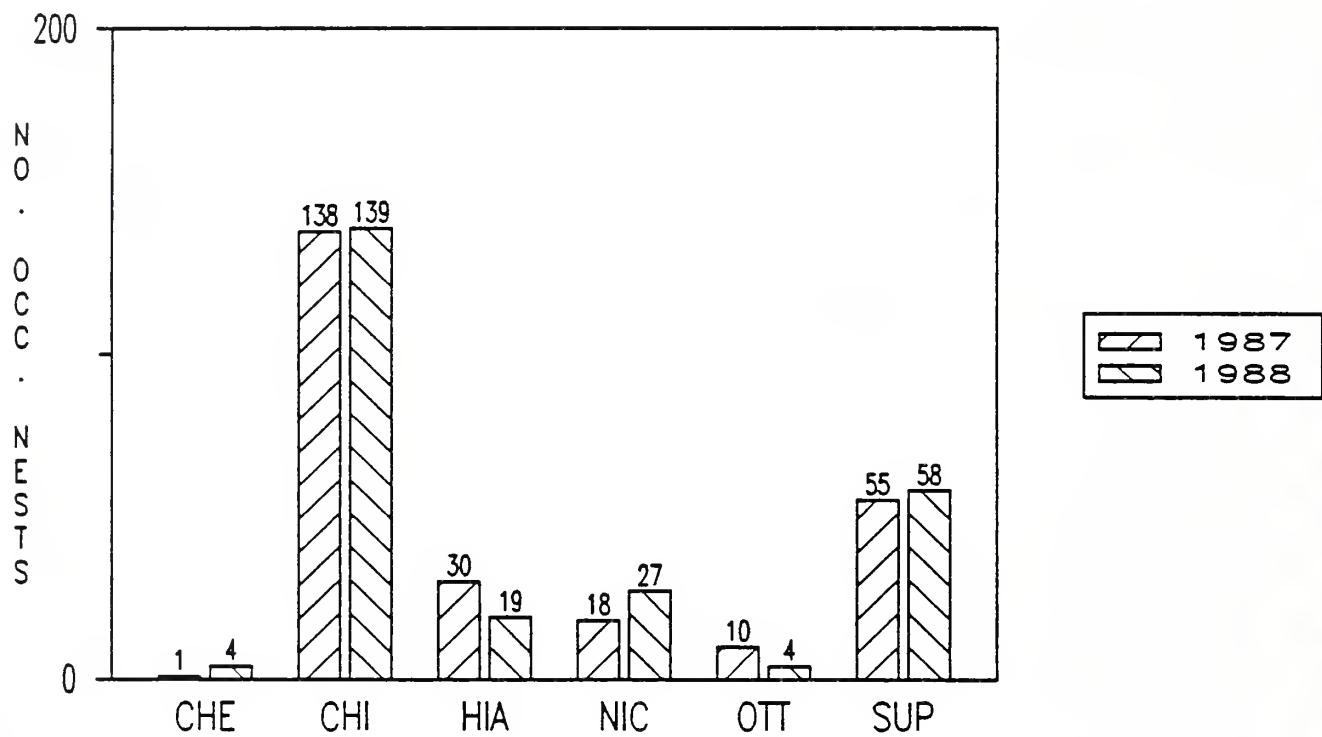
BALD EAGLE NESTING STATUS - 1988
USDA-FOREST SERVICE, EASTERN REGION

Forest and STATE	VERIFIED NESTS		AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
	1987	1988				
Hiawatha	11	11	13	11	2	3
Huron-Manistee	18	27	17	15	9	16
Ottawa	71	78	42	29	19	30
 MICHIGAN	 100	 116	 72	 55	 30	 49
Chippewa	237	238	152	135	91	146
Superior	105	96	81	65	50	76
 MINNESOTA	 342	 334	 233	 200	 141	 222
Mark Twain	1	2	2	2	2	2
 MISSOURI	 1	 2	 2	 2	 2	 2
Monongahela	1	1	1	1	1	1
 WEST VIRGINIA	 1	 1	 1	 1	 1	 1
Chequamegon	42	38	33	16	14	20
Nicolet	32	37	29	21	18	31
 WISCONSIN	 74	 75	 62	 37	 32	 51
 REGION TOTALS	 518	 528	 370	 295	 206	 325

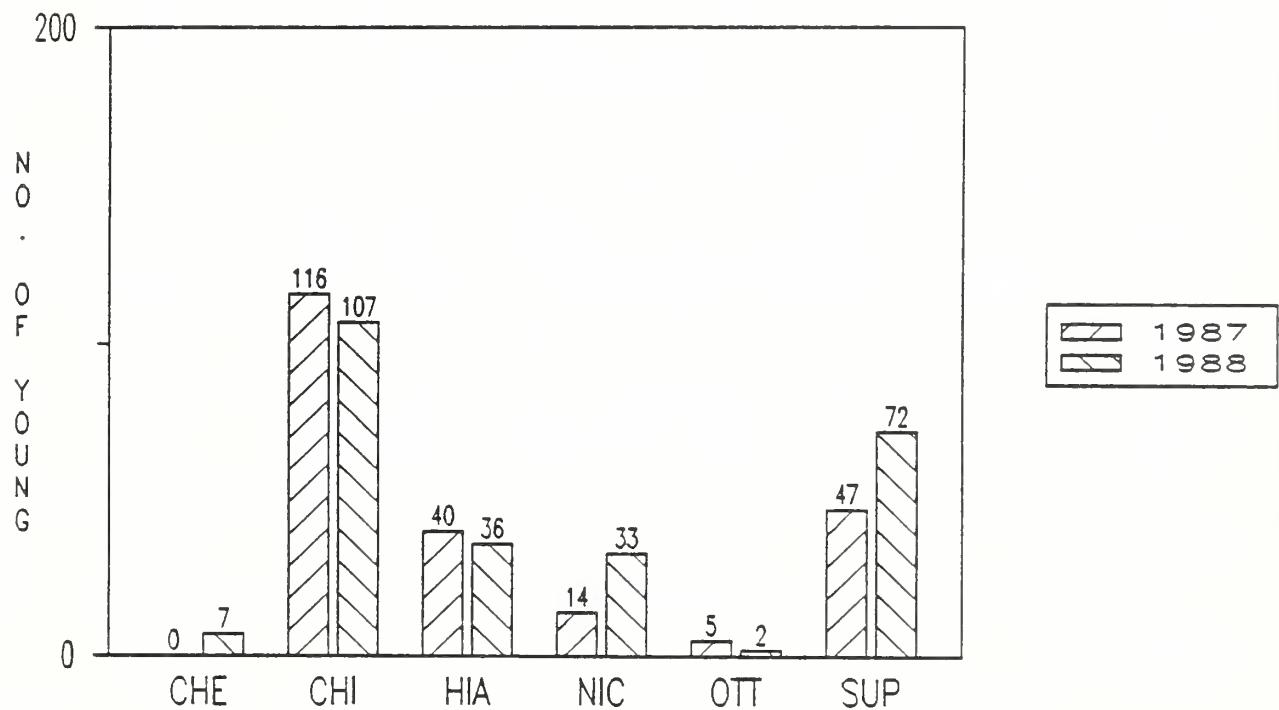
OSPREY NESTING TRENDS BY NATIONAL
FOREST

1987-1988 COMPARISONS

OSPREY OCCUPIED NESTS 1987-1988 COMPARISONS



OSPREY YOUNG PRODUCED 1987-1988 COMPARISONS



OSPREY NESTING STATUS - Year 1988
U.S.D.A.-FOREST SERVICE, EASTERN REGION

Forest and STATE	VERIFIED NESTS		AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
	1987	1988				
Hiawatha	32	29	35	19	19	36
Huron-Manistee	0	0	0	0	0	0
Ottawa	19	22	22	4	2	2
 MICHIGAN	 51	 51	 57	 23	 21	 38
Chippewa	207	216	139	139	65	107
Superior	89	114	88	58	40	72
 MINNESOTA	 296	 330	 88	 197	 105	 179
Mark Twain	0	0	0	0	0	0
 MISSOURI	 0	 0	 0	 0	 0	 0
Monongahela	0	0	0	0	0	0
 WEST VIRGINIA	 0	 0	 0	 0	 0	 0
Chequamegon	1	4	4	4	3	7
Nicolet	31	33	29	27	18	33
 WISCONSIN	 32	 37	 33	 31	 21	 40
REGION TOTAL	379	418	317	251	147	257

APPENDIX

NATIONAL FOREST EAGLE AND OSPREY NESTING SUCCESS TRENDS

DATA TABLES

BALD EAGLE NESTING TRENDS

CHEQUAMEGON NATIONAL FOREST

OSPREY NESTING SUCCESS TREND

CHEQUAMEGON NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED <u>NESTS</u>	SUCCESSFUL <u>NESTS</u>		YOUNG				
				No.	%	No.	%	Per	Per	
								Successful	Occupied	
				No.	%	No.	%	No.	Nest	Nest
1965	1		1	1						
1966	1		1	1						
1967	2		2	2			NOT CHECKED			
1968	1		0							
1969	1		1	1		1		1		
1970	1		1	1		1		1		
1971	1		1	1		?		?		
1972	1		1	1		0		0		
1973	1		1	1		NOT CHECKED				
1974	4		4	3		0		0		
1975	3		3	2		1		1		
1976	3		3	1		0		0		
1977	4		4	1		1		3		
1978	2		3	0		0		0		
1979	4		4	2		2		4		
1980	3		5	3		3		6		
1981	4		4	4		3		6		
1982	4		4	4		1		3		
1983	5		5	2		0		0		
1984	4		4	4		1		2		
1985	4		4	2		2		4		
1986	4		4	3		1		2		
1987	1		1	1		0		0		
1988	4		4	4		3		7		

BALD EAGLE NESTING TRENDS

CHIPPEWA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS	SUCCESSFUL NESTS		YOUNG		
				No.	%	No.	%	Per Successful Nest
								Per Occupied Nest
1963	48		20	6	30	10	1.7	
1964	55		30	12	40	14	1.2	
1965	76		39	22	56	29	1.3	
1966	107		52	19	61	28	1.5	
1967	135		49	21	43	30	1.4	
1968	142	71	52	33	63	50	1.5	
1969	139	75	60	29	48	44	1.5	
1970	141	93	65	35	54	62	1.8	
1971	143	99	65	40	62	61	1.5	
1972	142	107	73	40	55	70	1.8	
1973	147	108	70	42	60	72	1.7	1.0
1974	156	106	68	40	59	54	1.4	.8
1975	163	94	70	47	67	79	1.7	1.1
1976	176	94	67	48	72	78	1.8	1.2
1977	194	105	77	57	74	86	1.5	1.1
1978	200	107	80	75	56	92	1.6	1.2
1979	201	106	78	74	53	95	1.8	1.2
1980	209	112	77	69	62	81	1.8	1.5
1981	199	112	84	75	60	71	1.7	1.2
1982	193	116	90	78	66	73	1.6	1.2
1983	214	120	101	84	69	68	1.9	1.30
1984	203	118	92	78	64	70	1.7	1.20
1985	201	127	100	79	73	73	1.6	1.18
1986	209	136	112	82	85	76	1.6	1.21
1987	237	158	135	85	89	66	1.7	1.12
1988	238	152	135	89	91	67	1.6	1.08

OSPREY NESTING SUCCESS TREND

CHIPPEWA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED <u>NESTS</u>	SUCCESSFUL <u>NESTS</u>		YOUNG		
				No.	%	No.	%	Per
								Successful Occupied
								No. Nest Nest
1964	18							
1965	23		5					
1966	31							
1967	60		17			7		14
1968	73		40			13		19
1969	89		49			23		50
1970	99	52	52	28	54	48		
1971	90	49	49	22			39	
1972	104	59	59	34			60	
1973	124	72	72	NOT CHECKED				
1974	139	83	67	35	52	59		
1975	131	56	56	29	52	46		
1976	138	50	50	24	48	43		
1977	146	87	87	80	37	42	66	1.8 .76
1978	214	96	78	81	19	24	30	1.6 .38
1979	201	201	122	61	59	48	97	1.6 .80
1980	188	188	142	76	87	61	175	2.0 1.23
1981	161	161	118	73	63	53	102	1.6 .86
1982	157	145	111	77	73	66	111	1.5 1.00
1983	176	161	93	58	49	53	83	1.7 .89
1984	164	160	125	78	53	42	94	1.8 .75
1985	175	187	129	69	58	45	94	1.6 .73
1986	171	--	124	--	51	41	82	1.6 .66
1987	207	--	138	65	87	63	116	1.3 .84
1988	216	--	139	--	65	47	107	1.6 .77

Bald Eagle Nesting Trends

HIAWATHA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	21								
1965	23		17	74	6	35	7	1.2	
1966	34		7	27	2	29	4	2.0	
1967	35	17	11		2	18	3		
1968	39		1		4	57	4		
1969	45	20	10		1		2		
1970	39	24	9		2	44	4		
1971	40	14	6		2	33	3		
1972	36	22	5		0		0		
1973	37	24	7		2		3		
1974	29	20	6		1		1		
1975	25	26	8		2		2		
1976	19	23	7		1		1		
1977	16	16	6		2		3		
1978	14	11	4		1		1		
1979	19	14	2		0		0		
1980	17	14	4		3	75	4	1.3	
1981	12	9	4		2	50	4	2.0	
1982	13	9	5	56	3	60	4	1.3	
1983	12	9	6	67	2	33	2	1.0	.33
1984	11	9	5	56	2	40	4	2.0	.80
1985	11	8	6	75	3	50	3	1.0	.50
1986	9	8	6	75	3	50	5	1.7	.83
1987	11	10	9	90	6	67	6	1.0	.67
1988	11	13	11	85	2	18	3	1.5	.27

OSPREY NESTING SUCCESS TREND

HIAWATHA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED <u>NESTS</u>	SUCCESSFUL <u>NESTS</u>		YOUNG				
				No.	%	No.	%	Per	Per	
								Successful	Occupied	
								No.	Nest	Nest
1964	13									
1965	11			3		1		2		
1966	12			9		1		2		
1967	18		14	8		3		5		
1968	20			9		5		5		
1969	24		14	9		2		2		
1970	26		16	10		3		7		
1971	NO SURVEY									
1972	24		15	11		6		8		
1973	19		15	11		7		13		
1974	16		15	10		6	60	13		
1975	17		13	12		1		1		
1976	26		23	15		9	60	16		
1977	23		21	16		8	50	13		
1978	20		18	16		14		14		
1979	23		21	16		10	63	21	2.1	1.31
1980	24		20	11		6	55	10	1.7	.91
1981	22		21	16		9	56	18	2.0	1.13
1982	22		24	19		10	53	21	2.1	1.12
1983	26		24	22		12	55	26	2.2	1.18
1984	25		25	20	80	12	60	25	2.1	1.25
1985	26		26	26		20		39	1.9	1.50
1986	30		33	29	88	20	69	32	1.6	1.10
1987	32		34	30	88	20	67	40	2.0	1.33
1988	29		35	19	54	19	100	36	1.9	1.89

BALD EAGLE NESTING TRENDS

NICOLET NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS	SUCCESSFUL NESTS		YOUNG		
				No.	%	No.	%	Per Successful Nest
								Per Occupied Nest
1963	5							
1964	11							
1965	10		4			1		2
1966	13		9					
1967	15		9					
1968	18		11			4	36	7
1969	17		12			6	67	12
1970	19		11			7	100	14
1971	NO SURVEY							
1972	19		16			5	56	6
1973	27		18			8	57	13
1974	32		22			12	63	18
1975	30		21			11	69	17
1976	30		20			10	56	16
1977	32		22			12	67	19
1978	39		24			12	55	20
1979	37		24			16	94	23
1980	40		24			10	50	20
1981	44		24			14	78	23
1982	44		23			12	71	22
1983	38		25			17	68	12
1984	44		25			16	70	11
1985	41		26			15	58	12
1986	30		26			16	62	11
1987	32		29			21	72	18
1988	37		29			21	72	18

OSPREY NESTING SUCCESS TREND

NICOLET NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS		YOUNG		
				No.	%	No.	%	No.
1964	10							
1965	10		7	4				3
1966	10		7					
1967	16		9					
1968	16		11					
1969	26	17	6	1				1
1970	19	14	15	8				15
1971	NO SURVEY							
1972	30	25	17	4				6
1973	31	29	19	7				12
1974	37	37	25	10	40			15
1975	36	35	15	12	80			26
1976	32	32	20	11	55	22	2.0	1.10
1977	27	35	19	13	68	22	1.7	1.16
1978	29	30	20	7	35	11	1.6	.55
1979	24	30	20	11	50	21	1.9	1.05
1980	26	27	22	8	36	14	1.8	.64
1981	32	26	20	6	30	11	1.8	.55
1982	31	26	21	15	71	26	1.7	1.24
1983	33	28	20	12	60	18	1.5	.90
1984	28	26	14	54	8	57	18	2.3
1985	28	28	19	68	7	37	10	1.4
1986	36	28	19	68	13	68	20	1.5
1987	31	26	18	69	12	67	14	1.1
1988	33	29	27	93	18	67	33	1.8

BALD EAGLE NESTING TRENDS

OTTAWA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	26								
1965	32		20	80	13	65	18	1.4	.9
1966	43		21	53	15	71	21	1.4	1.0
1967	47	31	22	47	12	55	19	1.6	.9
1968	46	32	22		11	50	16	1.5	.7
1969	53	36	24		15	62	20	1.3	.8
1970	54	36	26		13	50	20	1.5	.8
1971	61	42	30		14	47	22	1.6	.7
1972	60	45	30		19	61	30	1.6	.9
1973	66	41	33		25	76	37	1.5	1.1
1974	60	35	27		11	41	18	1.6	.7
1975	67	41	33		21	64	39	1.9	1.2
1976	76	44	30		25	33	39	1.6	1.3
1977	76	42	31		22	71	36	1.6	1.2
1978	76	43	31		21	68	33	1.6	1.1
1979	71	43	30		23	77	37	1.6	1.2
1980	72	44	30		21	70	32	1.5	1.1
1981	78	45	32	73	24	75	37	1.5	1.2
1982	73	46	31	67	16	52	27	1.7	.9
1983	74	46	33	78	17	52	26	1.5	.79
1984	75	46	29	63	15	52	22	1.5	.76
1985	67	45	37	82	21	57	32	1.5	.86
1986	65	42	38	90	16	42	26	1.6	.68
1987	71	46	33	72	15	45	28	1.9	.85
1988	78	42	29	69	19	66	30	1.6	1.03

OSPREY NESTING SUCCESS TREND

OTTAWA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED <u>NESTS</u>	SUCCESSFUL NESTS		YOUNG		
				No.	%	No.	%	Per
								Successful Occupied
								No. Nest Nest
1964	6							
1965	6							
1966	5							
1967	8	9	3	1		1		
1968	9	8	7	1		2		
1969	8	7	0	2		2		
1970	12	10	6	3		7		
1971	10	11	8	5		8		
1972	10	8	8	3		7		
1973	13	10	9	1		2		
1974	14	11	8	4	50	8	2.0	1.00
1975	11	10	10	5	50	13	2.6	1.30
1976	12	12	10	5	50	7	1.4	.70
1977	15	14	13	8	62	12	1.5	.92
1978	16	14	11	7	64	9	1.3	1.82
1979	13	14	9	6	66	9	1.5	1.00
1980	14	13	10	8	80	15	1.9	1.50
1981	17	14	11	4	36	8	2.0	.73
1982	17	13	9	5	56	10	2.0	1.11
1983	17	13	9	2	22	5	2.5	.56
1984	13	12	11	92	4	36	5	1.3
1985	13	13	9	69	2	22	5	2.5
1986	13	16	9	56	6	67	9	.56
1987	19	20	10	50	5	50	5	1.5
1988	22	22	4	18	2	50	2	1.0

BALD EAGLE NESTING TRENDS

SUPERIOR NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	<u>OCCUPIED NESTS</u>	<u>SUCCESSFUL NESTS</u>		YOUNG		
				No.	%	No.	%	No.
1964	8							
1965	32		20	14		24	1.7	
1966	36		12	5		6	1.2	
1967	37		5	4		7		
1968	36		9	6		9		
1969	53		12	11		16		
1970	NO SURVEY							
1971	49		10	10		14	1.4	
1972	65		30	26		29	1.5	.9
1973	67		48	26		24	1.3	
1974	66		47	30		17		
1975	75		75	26		35	1.5	1.4
1976	73		52	32		29	1.1	.9
1977	65		52	39		43	1.5	1.1
1978	70		50	34		38	1.5	1.1
1979	68		51	36		40	1.7	1.1
1980	74		57	34		39	1.6	1.2
1981	76		53	34	64	32	1.4	.9
1982	68		57	30	53	36	1.5	1.2
1983	73		61	40	66	50	1.6	1.25
1984	82		64	50	78	47	1.6	.9
1985	84		70	24*	11*	46	1.6	.75
1986	84		68	42	67	46	1.5	1.10
1987	105		75	50	67	59	1.6	1.18
1988	96		81	65	80	76	1.5	1.17

* BWCA Success not surveyed.

OSPREY NESTING SUCCESS TREND

SUPERIOR NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS		YOUNG		
						Per Successful		Per Occupied
				No.	%	No.	%	No.
1964	7							
1965	28		21	5		6		
1966	31		8	2		2		
1967	33		1	1		2		
1968	33		6	1		1		
1969	35		7	1		1		
1970	NO SURVEY							
1971	39	8	8	7		8		
1972	36	22	15	12	80	16		
1973	38	27	15	6	40	9		
1974	42	49	27	18	67	23		
1975	40	40	19	11	58	15		
1976	38	34	21	21	100	32	1.5	1.04
1977	39	36	23	64	18	24	1.3	.95
1978	35	32	21	66	16	20	1.3	.96
1979	38	34	25	74	16	24	1.5	1.44
1980	50	55	36	65	30	83	52	.92
1981	71	60	51	85	32	63	47	.92
1982	89	82	53	65	37	70	58	1.09
1983	100	90	62	69	51	82	75	1.21
1984	109	100	74	74	47	64	78	1.05
1985	63*	97*	43*		18*	42	29*	1.6
1986	73*	71*	48*	68	27*	56	40*	1.5
1987	89*	98*	55*	56	33*	60	47*	.85
1988	114*	88*	58*	66	40*	69	72*	1.24

* BWCA not surveyed

BALD EAGLE NESTING TRENDS
HURON-MANISTEE NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG	
			No.	%	No.	%	No.	Per Successful Nest
							No.	Per Occupied Nest
1963								
1964	32							
1965	27		10		6		8	.8
1966	28		11		5		8	.7
1967	29	16	16		3	19	4	.3
1968	27		11		4	36	6	.6
1969	25	16	8		4	50	5	.6
1970	25	15	9		4	44	4	.5
1971	19	15	8		4	50	5	.6
1972	20	12	9		4	44	7	.8
1973	22	13	10		5	50	6	.6
1974	22	14	10		4	40	6	.6
1975	21	13	11		6	55	9	.8
1976	19	12	11		6	55	10	.9
1977	16	12	11		5	45	8	.7
1978	17	12	8		3	38	7	.9
1979	13	12	9		4	44	6	.7
1980	15	10	10		5	50	8	.8
1981	20	13	11		4	36	5	.5
1982	22	14	12	86	5	42	6	.5
1983	16	14	10	71	7	70	12	1.2
1984	15	12	10	83	5	50	9	.9
1985	15	13	10	77	5	50	8	.8
1986	17	13	9	69	6	67	9	1.0
1987	18	14	11	79	7	64	15	1.3
1988	27	17	15	88	9	60	16	1.1

